104TH CONGRESS 1ST SESSION

S. 1192

To promote marine aquaculture research and development and the development of an environmentally sound marine aquaculture industry.

IN THE SENATE OF THE UNITED STATES

AUGUST 11 (legislative day, JULY 10), 1995

Mr. Kerry (for himself, Mr. Pell, and Mr. Inouye) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To promote marine aquaculture research and development and the development of an environmentally sound marine aquaculture industry.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 **SECTION 1. SHORT TITLE.**
- 4 This Act may be cited as the "Marine Aquaculture
- 5 Act of 1995''.
- 6 SEC. 2. FINDINGS AND POLICY.
- 7 (a) FINDINGS.—The Congress finds the following:
- 8 (1) The annual demand for seafood products is
- 9 expected to increase by 350 million pounds by the

- 1 year 2000 as a result of population growth alone.
- 2 This demand will be satisfied by a combination of
- 3 United States harvests, fresh water and marine
- 4 aquaculture, and imports.

- (2) The marine fishery resources of the United States coastal zone, territorial sea, and exclusive economic zone are renewable, but finite. Sound fishery management programs cannot guarantee that the amount of marine fishery products available to the Nation from United States waters will meet consumer demand without supplementation from marine aquaculture.
 - (3) Worldwide there has been a major increase in marine aquaculture and many of these products have been aggressively marketed in the United States. Many of these programs are also heavily subsidized by foreign governments.
- (4) In some foreign nations marine aquaculture has not been adequately controlled and, as a result, there have been undesirable changes to the marine ecosystem which have contributed to production failures from both artificial and natural stocks of fish.
- (5) Within the United States private industry has primarily invested in and developed land-based aquaculture facilities, in part because these facilities

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are located on privately owned land, and in part because the potential environmental problems associated within these facilities are generally easier to control than those associated with marine facilities. Land-based facilities have also benefited from some of the traditional forms of economic assistance provided to farmers under programs administered by the Department of Agriculture.

(6) Private industry has not taken an equivalent initiative to invest in and develop marine aquaculture facilities within the United States, in part, because our marine waters are not susceptible to private ownership and because our marine waters also support other public trust uses, including navigation, fishing, recreation, and national defense. Additionally, marine aquaculture facilities present several environmental challenges requiring specialized scientific research and regulatory programs. Moreover, the traditional forms of economic assistance provided to fishermen under programs administered by the Department of Commerce have not been as widely available to marine aquaculture facilities because of restrictions in authorizing legislation and funding limitations.

- (7) Further, incorporating environmental concerns in the development of marine aquaculture will enhance the prospects of an economically and environmentally sustainable industry.
 - (8) There exist within the Department of Commerce a number of agencies and programs essential to stimulate the private development of marine aquaculture facilities, rebuild depleted fishery resources and protect the marine ecosystem. Among these are programs of the National Marine Fisheries Service, the National Sea Grant College Program, the National Ocean Service, the National Institute of Standards and Technology, the Economic Development Administration, the Minority Business Development Administration, and the International Trade Administration.
 - (b) Policy.—It is the policy of the United States—
 - (1) to encourage private enterprise to invest in and to develop new employment opportunities in marine aquaculture facilities by restructuring existing financial assistance programs and by safeguarding investments in marine aquaculture facilities;
 - (2) to promote research and development in marine aquaculture technology, marine biology, marine ecology, ocean engineering, economics, law, pub-

- lic policy and other disciplines that will contribute to the commercial success of new marine aquaculture facilities while safeguarding the marine ecosystem; and
- of any new marine aquaculture facility within a
 State coastal zone, the territorial sea, or the United
 States exclusive economic zone, is economically and
 environmentally sound and does not pose unreasonable constraints on other public trust uses of marine
 waters, such as navigation, fishing, recreation, and
 national defense.

13 SEC. 3. DEFINITIONS.

- 14 For the purposes of this Act:
- 15 (1) DIRECTOR.—The term "Director" means 16 the Director of the National Sea Grant College Pro-17 gram.
- 18 (2) Offshore marine aquaculture facil-19 ITY.—
- 20 (A) The term "offshore marine aqua-21 culture facility" means any facility which is lo-22 cated in whole or in part in the United States 23 exclusive economic zone, the purpose of which is 24 to raise, breed, grow, or hold in a living state 25 any marine or estuarine organism.

1	(B) Any vessel or other floating craft that
2	forms all or part of an offshore marine aqua-
3	culture facility, or any vessel or other floating
4	craft that discharges any material into an off-
5	shore marine aquaculture facility, shall not be
6	deemed to be a "vessel or other floating craft"
7	under section 502(12)(B) of the Clean Water
8	Act (33 U.S.C. 1362 et al.). Any discharge of
9	material directly into the waters of the facility
10	or from the facility into the surrounding waters
11	shall be considered a point source subject to
12	that Act.
13	(3) Secretary.—The term "Secretary" means
14	the Secretary of Commerce, acting through the
15	Under Secretary of Commerce for Oceans and At-
16	mosphere.
17	SEC. 4. MARINE AQUACULTURE RESEARCH AND DEVELOP-
18	MENT PROGRAM.
19	The National Sea Grant College Program Act (33
20	U.S.C. 1121 et seq.) is amended by inserting after section
21	206 the following:
22	"MARINE AQUACULTURE RESEARCH AND DEVELOPMENT
23	PROGRAM
24	"Sec. 206A. (a) Coastal and Marine aqua-
25	CULTURE RESEARCH AND DEVELOPMENT PROGRAM.—
26	The National Sea Grant College Program provided for

- 1 under section 204 shall include a national marine aqua-
- 2 culture research and development program under which
- 3 the Secretary, acting through the Director, shall make
- 4 grants and enter into contracts in accordance with this
- 5 section, and engage in other activities authorized under
- 6 this Act, to further research, development, education and
- 7 technology transfer in coastal and marine aquaculture and
- 8 accelerate the development and growth of a sustainable
- 9 marine aquaculture industry.
- 10 "(b) Program Scope.—The marine aquaculture re-
- 11 search and development program shall include research,
- 12 development, education and technology transfer programs
- 13 that address, but are not limited to, the following:
- 14 "(1) Fundamental biological knowledge needed
- for domesticating candidate species;
- 16 "(2) Environmentally safe technologies, meth-
- ods and systems for culturing marine species in the
- coastal environment, encouraging sustainable aqua-
- 19 culture practices, and remediating environmental
- problems;
- 21 "(3) Aquaculture technologies that are compat-
- ible with other uses of the sea;
- 23 "(4) Application of marine biotechnology to ma-
- 24 rine aquaculture;

- "(5) Methods for addressing and resolving conflicts between marine aquaculture and other competing users of the marine environment;
 - "(6) Comparative studies of State practices regarding the regulation and promotion of marine aquaculture so as to identify and resolve interstate conflicts and issues:
 - "(7) Education programs to foster understanding and awareness of the environmental and policy implications of aquaculture and marine aquaculture development, including the role of aquaculture in meeting consumer demand for seafood, and the role of aquaculture in rebuilding depleted fish stocks; and
- "(8) Development of pilot projects for offshoreaquaculture facilities.
- 16 "(c) Sea Grant Marine Advisory Services.—
- 17 The National Sea Grant College Program shall maintain,
- 18 within the Marine Advisory Service, the capability to
- 19 transfer relevant technologies and information to the ma-
- 20 rine aquaculture industry. Particular emphasis shall be
- 21 given to the matters referred to in subsection (b) (1)
- 22 through (8).

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- 23 "(d) Administration.—In carrying out the marine
- 24 aquaculture research and development program, the Di-
- 25 rector shall—

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- "(1) coordinate and administer the relevant activities of the Sea Grant College and any advisory committee and review panel established under subsection (f);
 - "(2) consult with the directors of State Sea Grant programs and other organizations with interests in aquaculture to identify program priorities and needs and, to the extent possible, undertake collaborative efforts, and use this information to identify priorities for marine aquaculture research and planning;
 - "(3) provide general oversight to ensure that the marine aquaculture research and development program produces the highest quality research, education and technology transfer and leads to opportunities for business development and jobs creation.

"(e) Grants and Contracts.—

"(1) IN GENERAL.—The Director, subject to the availability of appropriations, shall award grants and contracts in accordance with procedures, requirements, and restrictions under section 205 (c) and (d) for aquaculture research, education, technology transfer, and advisory proposals based on a competitive review of—

1	"(A) their respective scientific, technical,
2	and educational merits; and
3	"(B) their likelihood of producing informa-
4	tion and technology which lead to the growth
5	and development of a sustainable marine aqua-
6	culture industry.
7	"(2) Funding.—Grants made and contracts
8	entered into under this section shall be funded with
9	amounts available from appropriations made pursu-
10	ant to the authorization provided for under section
11	212(c), except that if the project under a grant or
12	contract was considered and approved, in whole or
13	in part, under grant or contract authority provided
14	for under section 205 (a) or (b) or section 3 of the
15	Sea Grant Program Improvement Act of 1976, the
16	grant or contract shall be funded from amounts
17	available to carry out that section.
18	"(f) Marine Aquaculture Advisory and Review
19	Panels.—
20	"(1) ESTABLISHMENT.—The Director may es-
21	tablish such advisory committees and review panels
22	as necessary to carry out this section, (or utilize any
23	such existing committee that satisfies the require-
24	ments of this subsection).

1	"(2) Membership.—Members of advisory com-
2	mittees and review panels should be selected to have
3	the professional expertise necessary to review grants
4	received, and in general, should include representa-
5	tives of relevant disciplines and professions such as
6	fisheries scientists, environmental scientists, and
7	representatives of the marine aquaculture and cap-
8	ture fishing industries.
9	"(3) Access to evaluations of grants and
10	CONTRACTS.—The Director shall provide to each ad-
11	visory committee and review panel established under
12	this subsection copies of appropriate grant and con-
13	tract application evaluations prepared by directors of
14	Sea Grant Colleges under section (e)(2)(A).
15	"(g) Authorization of Appropriations.—
16	"(1) Grants and contracts.—There is au-
17	thorized to be appropriated to carry out this section
18	(other than for administration)—
19	"(A) \$5,000,000 for each of fiscal years
20	1995 and 1996; and
21	"(B) \$7,000,000 for each of fiscal years
22	1997 and 1998.
23	"(2) Administration.—There is authorized to
24	be appropriated for the administration of this sec-
25	tion—

1	"(A) \$100,000 for each of fiscal years
2	1995 and 1996; and
3	"(B) \$120,000 for each of fiscal years
4	1997 and 1998.".
5	SEC. 5. AQUACULTURE IN THE COASTAL ZONE.
6	The Coastal Zone Management Act of 1972 is
7	amended—
8	(1) by adding at the end of section 306A(b) (16
9	U.S.C. 1455a(b)) the following:
10	"(4) The development of a coordinated process
11	among State agencies and between the State and
12	Federal Government, to regulate and issue permits
13	for aquaculture and marine aquaculture facilities in
14	the coastal zone."; and
15	(2) by adding at the end of section 309(a) (16
16	U.S.C. 1456b(a)) the following:
17	"(9) Adoption of procedures and policies to fa-
18	cilitate and evaluate the siting of public and private
19	marine aquaculture facilities in the coastal zone
20	which will assist States in formulating, administer-
21	ing, and implementing strategic plans for marine
22	aquaculture.''.
23	SEC. 6. OFFSHORE MARINE AQUACULTURE PERMITTING.
24	(a) Ownership, Construction, and Operation
25	of Offshore Marine Aquaculture Facilities.—

- 1 Notwithstanding subsection (n) of this section, no person
- 2 may own, construct, or operate an offshore marine aqua-
- 3 culture facility except as authorized by a permit issued
- 4 under this section.

culture facility.

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- (b) PERMIT ISSUANCE AND TERM.—
- (1) IN GENERAL.—The Secretary may issue, amend, renew, or transfer in accordance with this section permits which authorize the ownership, construction, or operation of an offshore marine aqua-
- 11 (2) TERM.—The term for a permit under this 12 section shall not exceed 10 years and may be re-13 newed after such time.
 - (3) Ownership.—Whereas a facility's physical structure, the organisms stocked therein, and any business interests in an offshore marine aquaculture facility can be privately owned by the permittee, the area of ocean used by a marine aquaculture facility remains in public ownership, with only a revocable use permit being granted to the permittee.
- 21 (c) PERMIT PREREQUISITES.—The Secretary may 22 not issue, amend, renew, or transfer a permit to a person 23 under this section unless—
- 24 (1)(A) each of the officials referred to in sub-25 section (e)(1) has certified to the Secretary that the

activities to be conducted under the permit would comply with laws administered by the official; or

(B) the permit establishes the conditions transmitted under subsection (e)(3)(A) by each of those officials that does not make that certification and each of the remainder of those officials makes that certification:

(2) the Secretary determines that—

- (A) construction and operation of a facility under the permit will comply with the environmental standards established by the Secretary under subsection (k) and will not significantly interfere with other public trust uses of the ocean, including recreational and commercial fishing, navigation, conservation, and aesthetic enjoyment;
- (B) the site for the facility will not interfere with facilities previously permitted under this section or any other Federal law; and
- (C) the person, upon revocation or surrender of the permit, will properly dispose of or remove the facility as directed by the Secretary; and

1	(3) the person provides the Secretary with a
2	bond or other assurances to pay for all costs associ-
3	ated with removal of the facility.
4	(d) Public Notice and Comment Period.—
5	(1) Notice.—The Secretary shall publish in
6	the Federal Register—
7	(A) notice of receipt of each application for
8	a permit under this section; and
9	(B) notice of issuance of each permit is-
10	sued, amended, renewed, or transferred under
11	this section.
12	(2) Public comment.—The Secretary shall
13	provide a 60 day comment period regarding each ap-
14	plication received by the Secretary for the issuance,
15	amendment, renewal, or transfer of a permit under
16	this section.
17	(e) Agency Notice and Comment.—
18	(1) Transmission of copies of applica-
19	TIONS.—Not later than 30 days after receiving an
20	application for a permit under this section, the Sec-
21	retary shall forward a copy of this application to-
22	(A) the Secretary of the agency in which
23	the Coast Guard is located;
24	(B) the Administrator of the Environ-
25	mental Protection Agency:

1	(C) the Secretary of the Interior;
2	(D) the Chairman of the Regional Fishery
3	Management Council under the Magnuson
4	Fishery Conservation and Management Act (16
5	U.S.C. 1801 et seq.) having authority over wa-
6	ters in which would occur the activities for
7	which the permit is sought, or having authority
8	over fish stocks which could be ecologically ef-
9	fected by construction or operation of such fa-
10	cility;
11	(E) the Secretary of Defense; and
12	(F) the Governor of each State—
13	(i) adjacent to the location specified
14	by the permit or which would be eco-
15	logically affected by permit activities; and
16	(ii) which has an approved coastal
17	zone management program under the
18	Coastal Zone Management Act of 1972 (16
19	U.S.C. 1451 et seq.).
20	(2) CERTIFICATION OF COMPLIANCE.—Subject
21	to paragraph (4), not later than 90 days after re-
22	ceiving a copy of a permit application transmitted
23	under paragraph (1), the official shall certify to the
24	Secretary whether or not the activities to be con-

- ducted under the permit would comply with the laws administered by the official.
 - (3) Transmittal of reasons for non-compliance and permit conditions.—If an official certifies under paragraph (1) that activities to be conducted under a permit is sought would not comply with a law—
 - (A) the official shall transmit to the Secretary the reasons for that noncompliance and any permit conditions that would ensure compliance; and
 - (B) the Secretary shall establish those conditions in any permit for the activity issued under this subsection.
 - (4) EXTENSION OF TIME FOR CERTIFICATION.—An official may request, in writing, that the Secretary extend by not more than 30 days the period for making certifications under paragraph (2). The Secretary may grant the extension for good cause shown.
 - (f) Permit Revocation or Surrender.—
 - (1) Revocation.—The Secretary may revoke any permit issued under this section if the permittee is found to be in substantial violation of any term

- of the permit, this section, or any regulation promulgated pursuant to this section.
- 3 (2) SURRENDER.—A permittee may surrender a 4 permit under this section to the Secretary at any 5 time, subject to any safeguards or conditions estab-6 lished by the Secretary.
- 7 (g) Permit Renewal and Transfer.—A permit
- 8 under this section may be renewed or transferred in ac-
- 9 cordance with the procedures and requirements applicable
- 10 to the issuance of a new permit. The term of a permit,
- 11 upon renewal, shall not exceed 10 years.
- 12 (h) FEES.—The Secretary may assess permit fees not
- 13 to exceed the cost of administering the program author-
- 14 ized by this section.
- 15 (i) CIVIL PENALTY.—The Secretary may assess a
- 16 civil penalty of not more than \$100,000 for each violation
- 17 of a permit under this section.
- 18 (j) Promulgation of Regulations.—The Sec-
- 19 retary shall promulgate regulations as necessary to carry
- 20 out this section.
- 21 (k) Environmental Standards.—
- 22 (1) ESTABLISHMENT.—Within 2 years after the
- date of enactment of this Act, the Secretary shall
- issue regulations which establish minimum environ-
- 25 mental standards with respect to offshore marine

1	aquaculture facilities. Such standards shall be de-
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2	signed to minimize the potential for adverse impacts
3	on the marine environment from such facilities and
4	shall include—
5	(A) safeguards to conserve genetic re-
6	sources, including methods to minimize genetic
7	mixing of cultured stocks and natural marine
8	stocks;
9	(B) safeguards to prevent or minimize eco-
10	logical or economic harm to marine ecosystems
11	by intentional or unintentional introductions of
12	nonindigenous marine aquaculture species;
13	(C) safeguards to prevent or minimize
14	transmission of disease to wild stocks;
15	(D) safeguards to maintain applicable Fed-
16	eral water quality standards;
17	(E) safeguards to ensure that any efforts
18	to control predation on cultivated stocks are en-
19	vironmentally and ecologically sound; and
20	(F) other applicable measures to protect
21	the marine environment.
22	(2) INCLUSION OF PERMIT TERMS.—The stand-
23	ards established under paragraph (1) shall be treat-
24	ed as part of the terms of each permit issued under

this section.

- 1 (3) REVIEW.—The Secretary shall periodically
 2 review the standards established under paragraph
 3 (1) and revise the standards based on significant
 4 new information including results of the pilot
 5 project.
- 6 (l) CUMULATIVE EFFECTS.—The Secretary shall re7 port to Congress 5 years after the enactment of this Act
 8 on all permits issued under this Act, including the cumu9 lative effects of all permitted facilities on public trust uses
 10 of the ocean.
- 11 (m) Offshore Marine Aquaculture Pilot Pro-12 grams.—
 - (1) IN GENERAL.—The Secretary in cooperation with other Federal and State agencies, acting through the National Sea Grant College Program, is authorized to conduct, to make grants for, or to contract for, projects to demonstrate sustainable approaches to development, installation, or operation of offshore marine aquaculture facilities. Such projects shall take into consideration any environmental guidelines developed by the Secretary, and shall, to the maximum extent practicable, meet the requirements of permits issued under this section.

- (2) TERM.—Any pilot project authorized pursuant to this subsection shall be for a term not to exceed two years, and may be renewed after such time.
 - (3) Purpose.—Such projects shall demonstrate the technological and economic feasibility of various marine aquaculture technologies which will contribute substantially to the development of a sustainable marine aquaculture industry.
 - (4) Ecosystem safeguards.—The Secretary, in selecting projects under this subsection, shall be satisfied that any project authorized will not adversely affect the marine environment, and shall be designed to prevent or minimize ecological or economic harm to marine ecosystems by intentional or unintentional introductions of nonindigenous marine aquaculture species.
 - (5) CONTENTS OF PUBLIC ANNOUNCEMENTS.—
 The Secretary shall make a public announcement concerning—
 - (A) the title, purpose, intended completion date, identity of the grantee or contractor, and proposed cost of any grant or contract with a private or non-Federal agency for any research, demonstration, pilot project, study, or report under this subsection; and

- 1 (B) the results, findings, data, or rec-2 ommendations made or reported as a result of 3 such activities.
 - (6) TIME.—A public announcement required by paragraph (5)(A) shall be made within 30 days after making a grant or contract, and a public announcement required by paragraph (5)(B) shall be made within 90 days after the receipt of such results.
 - (7) Publication of Summaries of Results; Submission to Appropriate Congressional Committees.—The Secretary shall publish summaries of the results of activities carried out pursuant to this subsection not later than 90 days after the completion thereof. The Secretary shall submit to the Senate Committee on Commerce, Science, and Transportation copies of all such summaries.

17 SEC. 7. MODEL ENVIRONMENTAL GUIDELINES.

- (a) Model Environmental Guidelines.—
 - (1) Within two years after the date of enactment of this Act, the Secretary in consultation with other appropriate Federal and State agencies, shall develop and establish model environmental guidelines with respect to marine aquaculture facilities located within State waters.

- 1 (2) In order to carry out this section, the Sec-2 retary shall seek advice from representatives of rel-3 evant disciplines and professions such as fisheries scientists, environmental scientists, and representa-5 tives of the marine aquaculture and capture fishing 6 industries, and may utilize any Marine Aquaculture 7 Advisory and Review Panels established under sec-8 tion 206A(f) of the National Sea Grant College Program Act. 9
 - (3) The Secretary shall provide public notice in the Federal Register and allow for a 90 day comment period before finalizing its model guidelines.
 - (4) The guidelines should include best management practices to minimize the potential for damage to the marine ecosystem from marine aquaculture facilities, including, but not limited to—
 - (A) conserving genetic resources, including methods to minimize genetic mixing of cultured stocks with natural marine stocks;
 - (B) preventing or minimizing ecological or economic harm to marine ecosystems by intentional or unintentional introductions of nonindigenous marine aquaculture species;

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- 1 (C) maintaining applicable Federal and 2 State water quality standards by marine aquaculture facilities: 3 (D) minimizing "visual pollution" and 4 other interference with public trust uses of the 6 ocean from marine aquaculture facilities; and (E) ensuring that any efforts to control 7 predation on cultivated stocks are environ-8 9 mentally and ecologically sound. 10 (5) The Secretary shall also develop a program 11 to promote voluntary compliance by the marine 12 aquaculture industry with the guidelines. 13 (b) STATE AQUACULTURE MANAGEMENT.—Upon completion of environmental guidelines, the Secretary 14 15 shall submit the environmental guidelines to State coastal zone management agencies, and other Federal and State 16 17 agencies with a role in aquaculture, marine aquaculture or other coastal and marine resources. These State agencies shall review the environmental guidelines for marine aquaculture operations and consider incorporating them into State aquaculture programs or permitting processes 21 where applicable. SEC. 8. ECONOMIC DEVELOPMENT.
- 24 (a) Comprehensive Report.—The Secretary shall 25 review all programs administered by the Department of

- 1 Commerce through the National Oceanic Atmospheric Ad-
- 2 ministration, the National Institute of Standards and
- 3 Technology, the Economic Development Administration,
- 4 the Minority Business Development Administration, and
- 5 the International Trade Administration that pertain to the
- 6 seafood industry. Within two years after the date of enact-
- 7 ment of this Act, the Secretary shall report to Congress
- 8 how the Department of Commerce programs have been
- 9 employed to stimulate the development of commercial ma-
- 10 rine aquaculture facilities within the United States or the
- 11 exclusive economic zone. The report shall include rec-
- 12 ommendations for changes in any Federal law or adminis-
- 13 trative procedure that, in the judgment of the Secretary,
- 14 constitutes an unreasonable impediment to the growth of
- 15 a commercially and environmentally sound marine aqua-
- 16 culture facility.
- 17 (b) Economic Assistance.—The Secretary shall
- 18 make the financial assistance programs of the Department
- 19 of Commerce fully available to qualified applicants seeking
- 20 to construct marine aquaculture facilities in a State coast-
- 21 al zone or the United States exclusive economic zone. The
- 22 programs shall include, but not be limited to, the Capital
- 23 Construction Fund Program, the Fisheries Obligation
- 24 Guarantee Program, the Saltonstall-Kennedy Grant Pro-
- 25 gram, the Marine Fisheries Initiative Grant Program, and

- 1 the programs of the Economic Development Administra-
- 2 tion. To the extent such projects are economically sound,
- 3 the Secretary shall grant priority to applicants from those
- 4 regions of the United States where marine fishery con-
- 5 servation requirements have led to reduced employment in
- 6 the commercial or recreational fishing industry.

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